

A Northern Highways Strategy ... Advancing The Alberta Advantage

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**Northern Alberta Development Council
June 2001**

A Northern Highways Strategy ... Advancing The Alberta Advantage

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Building For Tomorrow...Today

A Northern Highways Strategy ... Advancing The Alberta Advantage

Northern Alberta will continue to make a significant contribution to *The Alberta Advantage* as the Province of Alberta moves into the future. The building of northern highways will be a key factor in realizing the many northern economic development opportunities and the provincial benefits associated with them.

The proposed northern highways included in this proposed "Northern Highways Strategy" are all priorities. They will provide enhanced access to resources, tourism routes for the Province's growing tourism industry and connections to communities. These highways will also play a critical role in the integration of the Province of Alberta's highway system with neighbouring provincial and territorial jurisdictions.

When looking to the future of the Province of Alberta, the north will be an important cornerstone to the advancement of *The Alberta Advantage*. In order to advance, northern highways must be developed as a priority program for the Provincial Government.

The Northern Alberta Development Council recommends: *The Provincial Government to consider the provision of special, one-time funding for the complete implementation of the Northwestern Canadian Integrated Road Network Plan over a five-year period.*

The Alberta Advantage - A Northern Perspective


Introduction

The Northern Alberta Development Council understands the importance of a highway transportation network, as it is vital to develop the social and economic fabric of northern Alberta. Communities and businesses require a road network that links the regions of northern Alberta with each other and with Western Canada.

Overview of Economic Activity

The Province of Alberta receives a significant amount of its royalty revenues from northern Alberta. Northern Alberta (defined as the area covered by the Northern Alberta Development Council) is a significant contributor to the economy of Alberta. The north is rich in a variety of resources. Northern Alberta is a major producer of agriculture, forestry and energy products. Northern highway projects are an investment in Alberta's future. Highway infrastructure projects help communities and industry to grow and prosper and in turn this allows the Province to collect more revenues through royalties, timber fees, and corporate and personal taxes. Resource developments in northern Alberta are closely tied to government's ability to fund other priorities such as health and education.

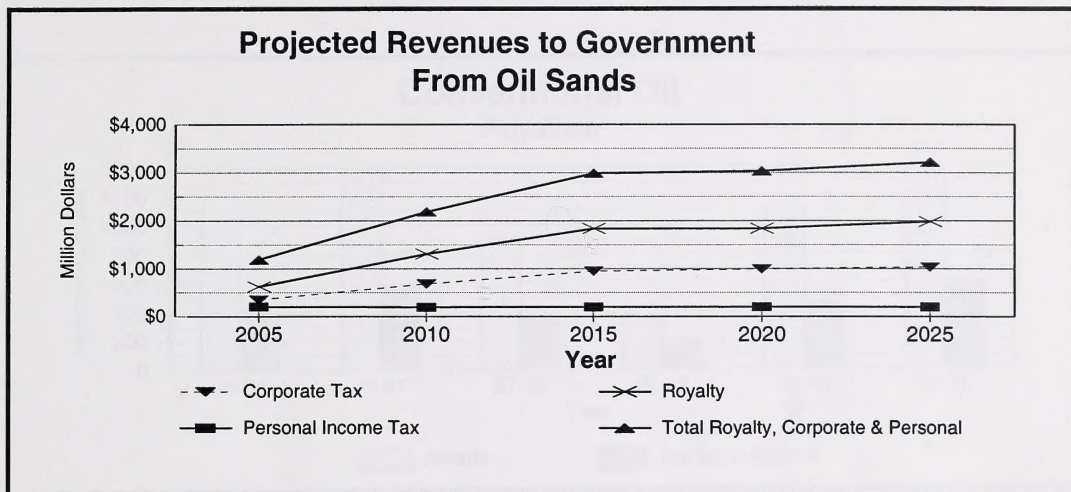
Oil sands developments are just one example of the significant contribution the overall northern energy sector makes to the provincial economy. All of Alberta's oil sands deposits are located in northern Alberta. In 1999, oil sands production amounted to 585 thousand barrels per day. By the year 2010, daily production is forecast to be 1.7 million barrels per day. This will result in more than 1.0 billion dollars of royalty. With more than 40 billion dollars of oil sands investment since 1996, 50,000 new jobs have created across Canada in addition to the 33, 000 people already employed in the sector.



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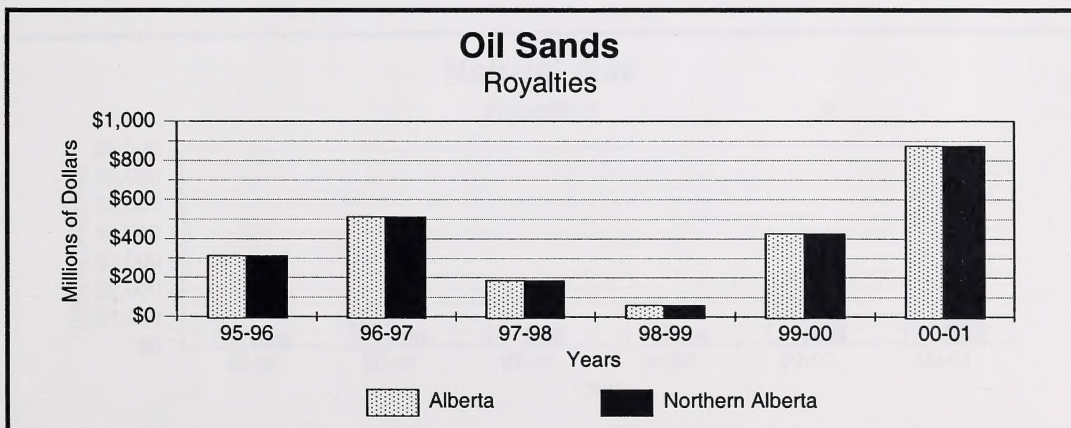
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Northern Oil Sands developments will contribute immensely to Government revenues over the upcoming 25 years. Total corporate tax, personal income tax and royalties for this period is forecast to be more than \$70 billion.



Source: Oil Sands Developers

The following chart shows Alberta oil sands. In the period 1995 - 2001 Alberta royalties amounted to \$2.367 billion.



Source: Sustainable Resource Development

Figure 1: A line graph showing the relationship between the concentration of a solution and its refractive index. The x-axis represents the concentration in g/100 ml, ranging from 0 to 10. The y-axis represents the refractive index, ranging from 1.00 to 1.10. Two data series are plotted: one for a 10% solution (represented by open circles) and one for a 20% solution (represented by open squares). Both series show a linear increase in refractive index with increasing concentration. The 20% solution consistently has a higher refractive index than the 10% solution for the same concentration.

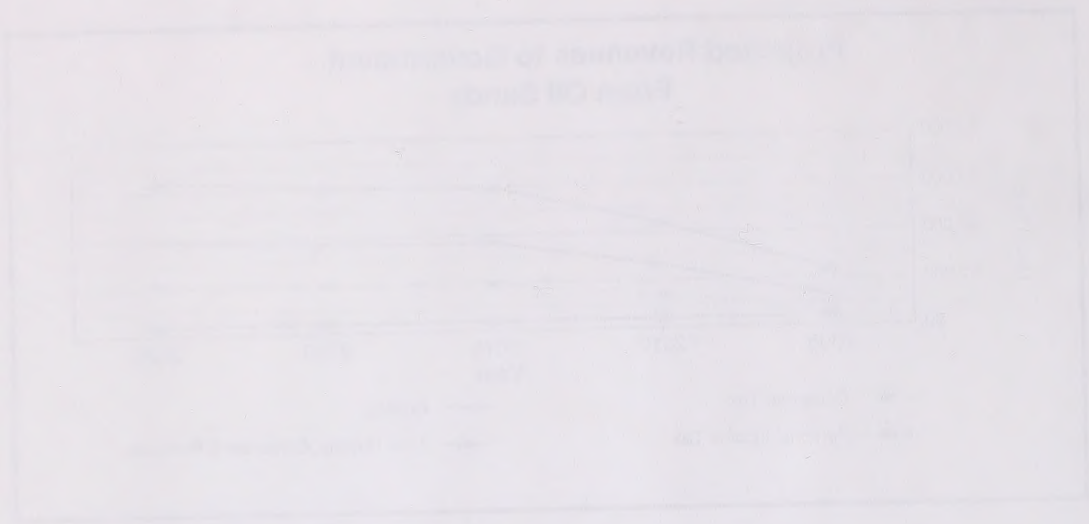


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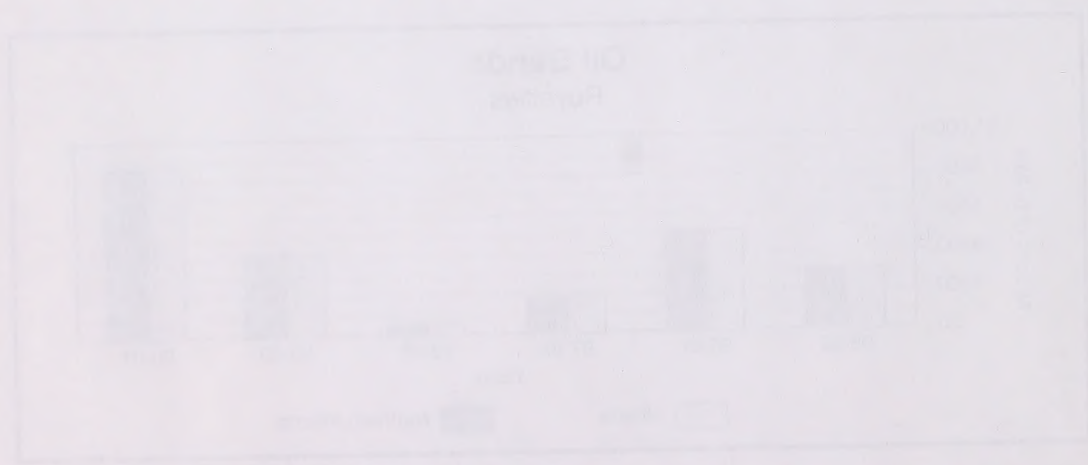
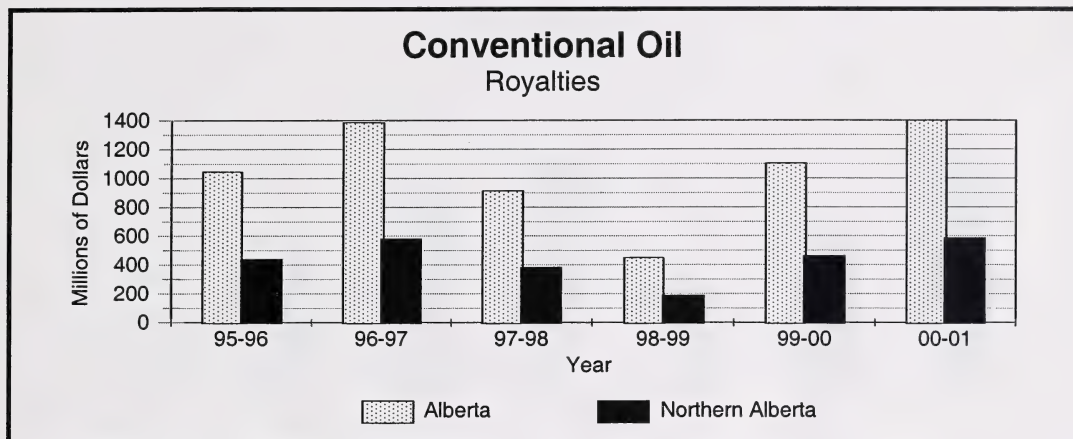


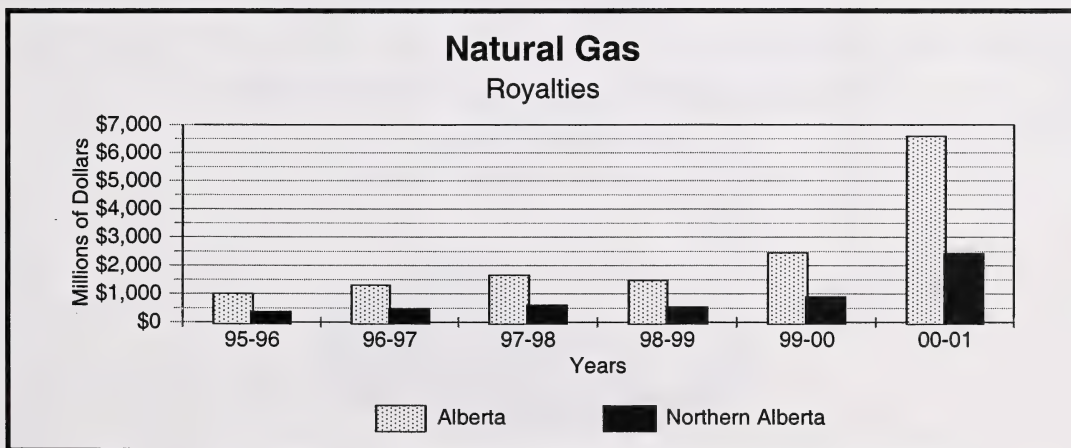
Figure 2: A bar chart showing the volume of oil spilled in different locations. The x-axis represents the location, and the y-axis represents the volume in liters. The locations are Beach, Water, Land, Air, and Other. The volumes are 1000, 500, 200, 100, and 50 liters, respectively.

The following chart shows Alberta conventional oil royalties. In the period 1995 - 2001 Alberta royalties amounted to \$6.299 billion. Northern Alberta accounts for 42 % of Alberta's conventional oil production. It is estimated that Northern Alberta contributed \$2.65 billion to the Provincial Treasury in this period



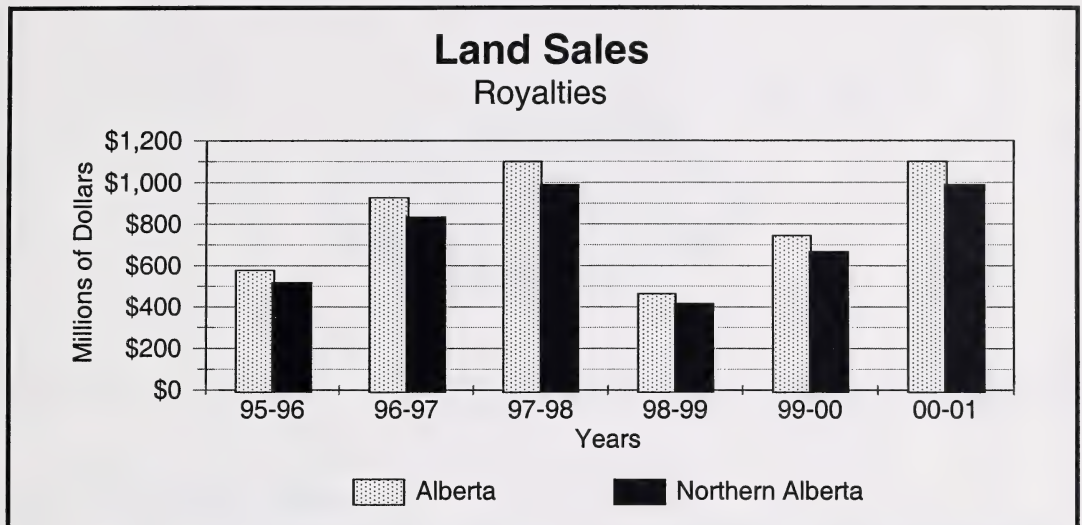
Source: Sustainable Resource Development

The following chart shows Alberta natural gas royalties. In the period 1995 - 2001 Alberta royalties amounted to \$14.461 billion. Northern Alberta accounts for 37 % of Alberta's natural gas production. It is estimated that Northern Alberta contributed \$5.351 billion to the Provincial Treasury in this period



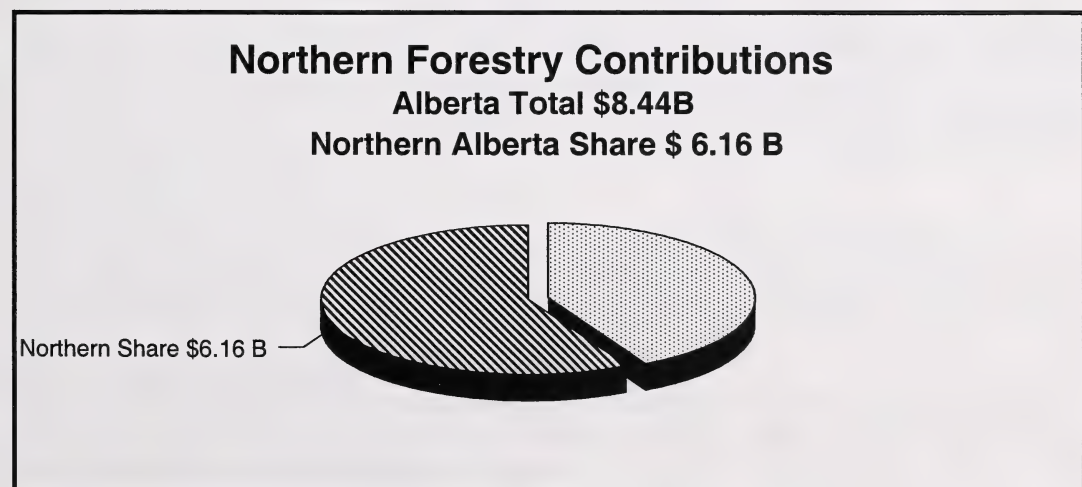
Source: Sustainable Resource Development

The following chart shows Alberta royalties collected through bonuses and sales of crown land leases. In the period 1995 - 2001 Alberta royalties amounted to \$4.910 billion. Northern Alberta accounts for 90 % of Alberta's crown land base. It is estimated that Northern Alberta contributed \$4.419 billion to the Provincial Treasury



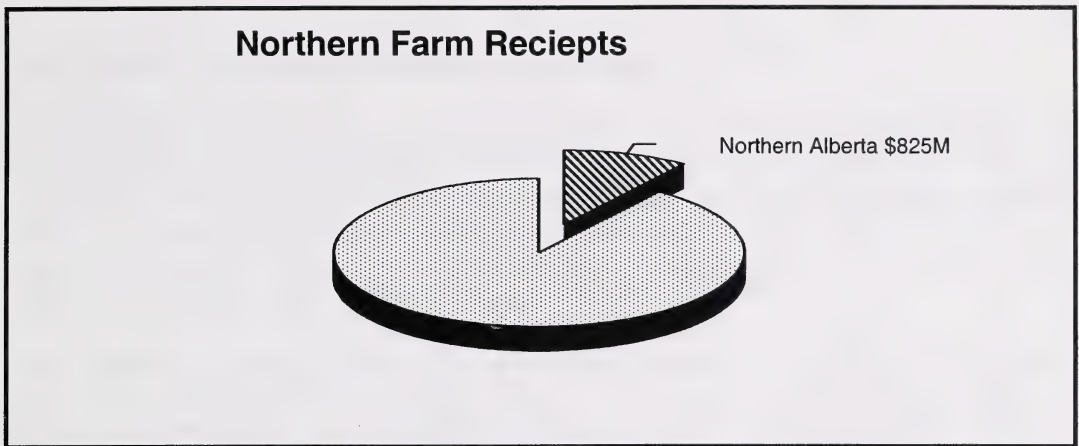
Source: Sustainable Resource Development

This chart shows the overall forestry sector contribution to Alberta for the 1997-98 timber year. The total revenues of all product sales including direct and indirect benefits, corporate and personal income tax, property tax and stumpage and protection charges amount to \$8.44 billion. Of this amount, \$6.16 billion can be attributed to Northern Alberta.



Source: Sustainable Resource Development

The following chart shows northern Alberta's portion of 1996 provincial gross farm receipts. This amounts to more than \$825 million or about 11 % of Alberta's total gross farm receipts.



Source: Alberta Agriculture Food and Rural Development

Future Northern Prospects

Northern Alberta has immense resource exploration and development potential such as mining, tourism, new commercial ventures and value added activities. Mining includes exploration, development and commercialization stages and each stage provides many spin-off benefits. Although no commercial mine (non energy type mine) operate in northern Alberta, in 1999 more than \$70 million was spent on gold, diamond, precious gem and base metal exploration. There have been some encouraging discoveries throughout northern Alberta.

Tourism

Highway infrastructure is necessary to support the development of a strong and vibrant tourism industry. Improvements in transportation will increase the region's ability to participate in expanding tourism markets. The abundance of lakes, forests and wildlife provide excellent resources for this industry. Each year, more visitors are attracted to the northern experience which include outdoor recreation, historic, cultural and urban attractions. Recently, Travel Alberta reported a 26% increase in northern tourism revenues.

Value -Added Industries

Northern Alberta is reliant on primary resource activities. As demand and markets change there is huge potential for northern Alberta to add value to products in the oil/gas, agriculture and forestry sectors. Secondary processing can be further advanced in northern Alberta if transportation challenges are addressed.

New Commercial Ventures

Road infrastructure projects strengthen businesses and industries that are already part of the region. Road development helps to diversify existing industries and spur new ventures that bring new employment and income to the region and Alberta.

One Priority - The Role of Northern Highways

Highways play an important role in the economic growth and development of northern Alberta. Due to the potential for economic activity in northern Alberta, today and into the future, there is a need to make the highways identified in the Northwestern Canada Integrated Road Network Plan the priority for highway development. All of the identified highways provide vital connections to resources, communities and neighbouring jurisdictions. The integration of the system will result in opportunities to further advance *The Alberta Advantage*.

Much of northern Alberta's economy is tied to the: development of natural resources; movement of commodities; and the inter-relationship between regions. Based on these considerations, the Province of Alberta must strive to build and maintain an effective highway system in northern Alberta. Highways are also vital in reducing the isolation of northern communities.

The rationale for this "one priority approach" is based on the significant need for northern highways and the significant revenues generated as a result of resource development in northern Alberta. It makes economic sense to undertake these projects now as a way to capture the future potential of the north while provincial revenues are available.

Northwestern Canadian Integrated Road Network Plan

In June 1998, the Western Premiers adopted a concept plan for the future development of highways in northwestern Canada. The Northwestern Canadian Integrated Road Network Plan provides a vision for the integration of road development in northwestern Canada, while recognizing the importance of highways to the advancement of northern development.

Many northern highways have been extensively studied and discussed amongst community, industry and provincial officials. Based on these consultations, key northern Alberta highway development projects were identified in the Network Plan. These highways support the current northern road network, while providing new regional and inter-provincial linkages.

Purpose

The overall goal of the Network Plan is to provide a framework for the future development of a road network in northwestern Canada, including northern Alberta, that is integrated.

Northern Alberta Road Projects

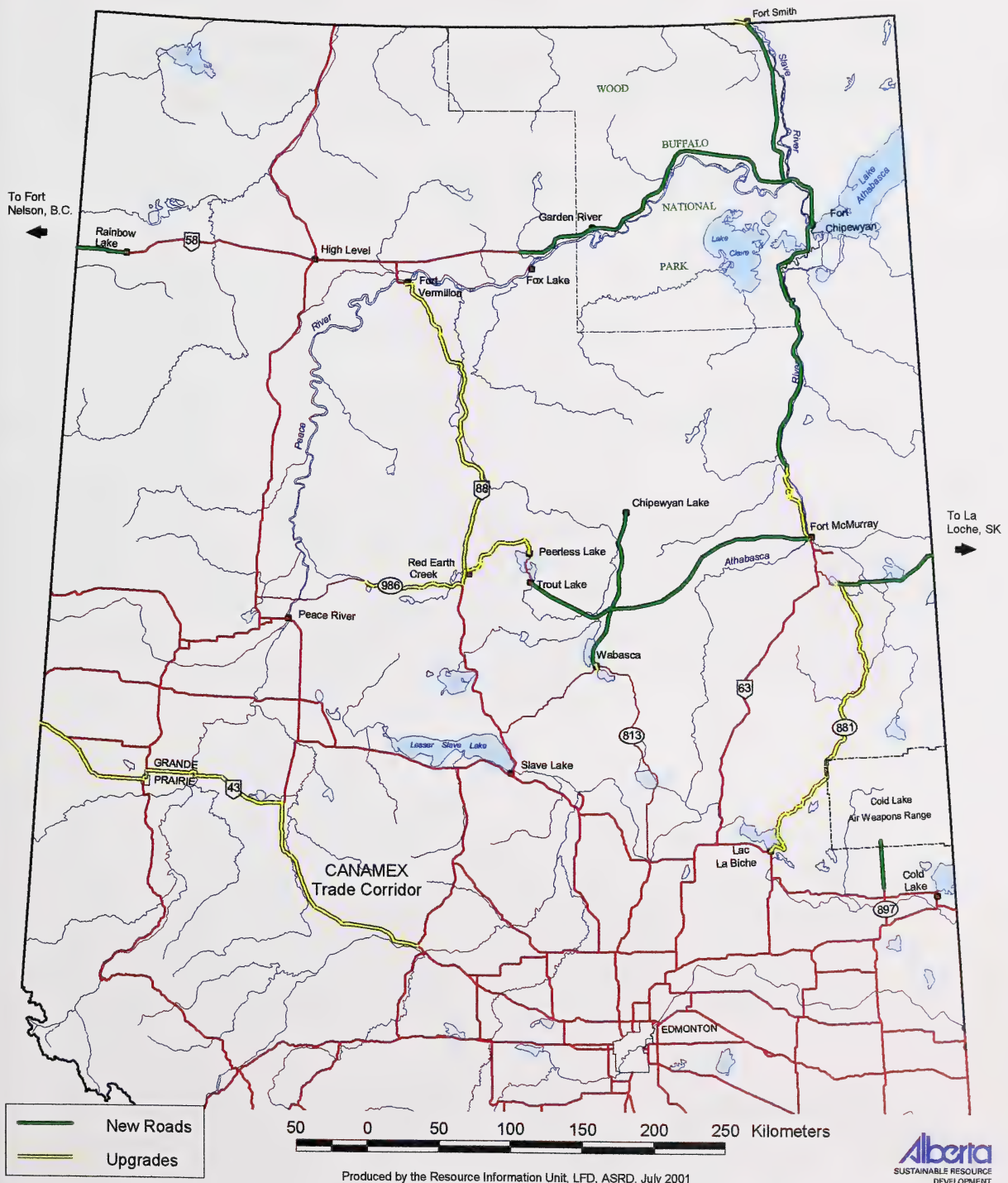
Northern regions have enormous development potential and will provide increased levels of wealth of all levels of government. Northern-based jurisdictions, including the Province of Alberta, share common opportunities and challenges in relation to future highway transportation needs.

The Northwestern Canadian Integrated Road Network Plan identified the following highway projects:

- Northern Alberta East-West Highway Corridor
- Highway #58
- Highway #88
- Secondary Highway # 881
- Secondary Highway #897
- Highway #63
- Secondary Highway #813
- CANAMEX Trade Corridor - Highway # 43

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Adapted from: Northwestern Canadian Intergrated Road Network Plan.



Northern Alberta Highways Strategy

A Priority For Alberta

The overall implementation of the Northwestern Canadian Integrated Road Network Plan should be a major priority for the Province of Alberta. This position is based on the following:

- significant contribution to *The Alberta Advantage* made by the northern economy;
- provincial revenue generation resulting from resource development in northern Alberta;
- advancing new opportunities in agriculture, tourism, non-energy mineral, forestry and resource development;
- enhancing connections to northern, remote communities; and
- greater highway integration across northwestern Canada.

While the development of northern Alberta's highway system is a priority for northerners, the realization of the above-noted benefits should make this initiative a priority for all Albertans.

Strategic Directions

Highway infrastructure proposed for northern Alberta supports a western Canada integrated road network system. Road supports economic development by providing access to resources and the transportation of commodities, products and services. Roads facilitate industry expansion plans which in turn generates provincial resource revenues. The economic and social well being in northern communities is tied closely to efforts to strengthen the northern economy. Some communities experience unemployment rates above the provincial averages. More northern roads will promote economic activity and improve labour participation rates, especially for young Aboriginal people living in this region.

Implementation Strategies

Alberta Transportation Business Plan

Alberta Transportation incorporates all road transportation projects in its three year business plan. The department's planning horizon should not be limited to this time frame. Road projects are dependant upon availability of funds and overall priority importance to Alberta. Construction projects are often phased over several construction seasons. Where possible, the department is encouraged to adopt a "start to finish" strategy. In some instances it would be more practical to apply sufficient resources to a single project and complete it sooner. This would reduce the costs of moving construction equipment and personnel and allow roads to be commissioned sooner.

Special Funding Program

Based on its consultation with northerners, the Northern Alberta Development Council believes that access to resources, services to industry/people and community de-isolation are key drivers for northern development. The implementation of the Northwestern Canadian Integrated Road Network Plan will help leverage many benefits related to the economy such as increased mobility of local residents, better labour supply, new employment opportunities, small business growth, revenues for all levels government. Roads are important to the industry because they reduce resource extraction and transportation costs, and provide an incentive to increase exploration activities which brings new projects to fruition more quickly.

The Northern Alberta Development Council recommends: *The Provincial Government to consider the provision of special, one-time funding for the complete implementation of the Northwestern Canadian Integrated Road Network Plan over a five-year period.*

Rationale

The rationale for this special funding request is based on the significant royalty revenues which accrue as a result of energy projects in northern Alberta. There is also a need to integrate growth across Alberta's northern regions including British Columbia and Saskatchewan. It makes economic sense to invest in these projects now, to compliment resource development activities and the accrual of royalties.

Existing Road Commitments and Maintenance

This request for special project funding will be separate from existing commitments except where the existing commitment is connected to the implementation of the Northwestern Canadian Integrated Road Network Plan.

This initiative would also be separate from the regular operation, upgrading and maintenance of highways in northern Alberta.

Northern Highways Projects

The Northern Alberta Development Council knows there will continue to be significant growth in northern Alberta in the years ahead. Road infrastructure will be a catalyst for northern Alberta economic development. Therefore the implementation of this northern highways strategy must be an essential part of the Province of Alberta's economic strategy.

New Road Developments

NORTHERN ALBERTA EAST-WEST HIGHWAY CORRIDOR

Fort McMurray - Peace River

Description:

This project would include the paving of Highway 986 between Peace River and Red Earth. The highway connection between Red Earth and Fort McMurray would be improved via Peerless Lake. This northern connection would: provide greater access to natural resources; tourism development opportunities; increasing labour supply for high growth areas; mobility related to employment.

Current Status:

There is a high degree of industry and community support for this project due to the following: lever many economic development and tourism opportunities; provide access to existing and undeveloped resources; including mineral exploration; de-isolation of northern communities (Chipewyan Lake); access to services and employment opportunities and greater connections to markets/ocean ports. There is a significant road network already in place, and further development by industry is on-going. This project will provide a coordinated approach to resource access development and provide a new much needed northern east-west public travel route.

Highway 58

Description

This project includes four components: 1) the extension of Highway 58 west to the British Columbia border; 2) upgrades to the existing highway between High Level and Rainbow Lake; 3) the extension of highway 58 to east Wood Buffalo National Park, and 4) the upgrade of an existing road within Wood Buffalo Park. Component one is new road construction: component two is widening of primary highway: component three is new road construction to Garden River: and component four is an upgrade. This project would provide access to resources, improve public safety and de-isolate two aboriginal communities, (Fox Lake and Garden River) and provide another connection to Fort Smith NWT.

Current Status

Industry has expressed its strong support for the widening of Highway 58 between High Level and Rainbow Lake. The Province of British Columbia has not yet made any commitments regarding the construction of its portion of the Fort Nelson - Rainbow Lake connector. The Federal Government has yet to decide about road access through the Wood Buffalo National Park. Alberta has plans to construct a new road to Fox Lake and Garden River.

Highway 88

Description

This project includes the upgrading and paving of Highway 88, north of Red Earth to Highway 58. This project facilitates public travel and resource extraction activities across a vast region. This route is an integral part of the northern road system which will connect east-west regions of northern Alberta. The project is expected to enhance economic development, reduce safety concerns and improves access to services.

Current Status

Last Fall, a regional business/community group made a presentation to the Minister regarding this project. The presentation emphasized the importance of the project and its relationship to the Northwestern Canadian Integrated Road Network Plan.

Highway 881

Description

This project involves two components; 1) the completion of upgrades planned for Highway 881 between Lac La Biche and Fort McMurray and 2) connector road to La Loche Saskatchewan. Highway 881 serves as an emergency route, as experienced during 1995 fire season when Highway 63 was closed for some time. The project provide an alternate route to oil sands development, enhances economic development and jurisdictional trade and improves community access (Janvier and Conklin).

Current Status

There have been several major industrial projects developed in this area and this route is needed to sustain current and future industry and community expansion plans. There is considerable interest from residents of north west Saskatchewan to access facilities and services in Fort McMurray as well.

Highway 63

Description

This project is the extension of Highway 63, north of Fort McMurray to Fort Chipewyan. This project will provide an all weather road to residents of Fort Chipewyan. It will reduce costs to service the region, create new economic opportunities and compliment the Northwestern Integrated Road Network plan

Current Status

It should be noted that with the oil sands expansion the route north of Fort McMurray has been extended some distance. As industry moves further north, public costs to build this road will decrease. Fort Chipewyan residents continue to discuss the need and most suitable route to their community.

Highway 813

Description

This project is the extension of Highway 813 from Wabasca north to Chipewyan Lake. This road will increase access to a large geographic area rich in resources. This road will also de-isolate the community of Chipewyan Lake. This project ties in to the proposed extension of Highway 686 connecting Peerless Lake to Fort McMurray.

Current Status

The Northern Alberta Development Council understands that Alberta Pacific Forest Products has plans to complete this route to all weather road standard by 2004.

Highway 897

Description

This project is the extension of Highway 897 into the Department of National Defence Air Weapons Range near Cold Lake. The air weapons range is of significant importance to Canada, especially our commitment to meet North Atlantic Treaty Organization (NATO) air training exercises. 4 Wing Cold Lake conducts annual international training operations in this area; a better road access would be beneficial. The energy sector is optimistic about the area's development potential.

Current Status

There are two major energy projects in this area and this route is needed to sustain current and future industry expansion plans.

CANAMEX Trade Corridor - Highway 43

Description

Alberta is part of the CANAMEX Trade Corridor system. This corridor consists of the American States of Arizona, Nevada, Utah, Idaho and Montana and several Mexican states. The key purpose of this international initiative is to facilitate transportation distribution, commerce and tourism between three countries.

The twinning of highway 43 between from Edmonton northwest to Grande Prairie and then to the British Columbia border is part of Alberta's contribution to the CANAMEX project.

Current Status

This project is underway and will remain a high priority under the Northern Highways Strategy.

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